

CLAIMS

1) An assembly for conveying packets (2), in particular packets (2) of cigarettes, comprising a first and a second conveyor (4, 5) for conveying the packets (2) at a first and a second travelling speed (V1, V2) respectively; the assembly (1) being characterized in that the first and the second conveyor (4, 5) extend side by side along at least a given portion (T) in a first direction (D1); the assembly (1) comprising a transfer device (6) having a deflecting member (21) for transferring the packets (2) from the first (4) to the second (5) conveyor along said given portion (T).

2) An assembly as claimed in Claim 1, characterized in that the deflecting member (21) comprises a drum (27) having blades (28) for varying the orientation of said packets (2) during transfer from the first (4) to the second (5) conveyor.

3) An assembly as claimed in Claim 2, characterized in that said drum (27) rotates about an axis (22) parallel to a second direction (D2) perpendicular to the first direction (D1); said blades (28) extending radially with respect to said axis (22) to rotate each packet (2) about the axis (22).

4) An assembly as claimed in Claim 3, characterized in that each blade (28) has a face (30) having suction holes for retaining one of said packets (2) during transfer between the first (4) and second (5) conveyor.

5) An assembly as claimed in Claim 1, characterized in that the first and second conveyor (4, 5) respectively comprise a first and a second supporting surface (10, 14) for said packets (2); the first and second supporting surface (10, 14) being substantially coplanar along said given portion (T).

6) An assembly as claimed in Claim 5, characterized in that the first and second conveyor (4, 5) comprise a first and a second belt (7, 11) for conveying the packets (2); the first and second belt (7, 11) respectively comprising a first and a second work branch (10, 11) defining the first and second supporting surface (10, 14) for said packets (2).

7) An assembly as claimed in Claim 1, characterized in that said deflecting member (21) is movable in the first direction (D1) along said given portion (T).

8) An assembly as claimed in Claim 7, characterized in that said transfer device (6) comprises a guide (18) parallel to said first direction (D1); and a carriage (19) which runs along said guide (18); said deflecting member (21) being fitted to said carriage (19).

9) An assembly as claimed in Claim 8, characterized in that said transfer device (6) comprises a transmission member (23) for moving said carriage (19) along said guide (18).

10) An assembly as claimed in Claim 9, characterized in that the first conveyor (4) comprises a first drive member (15) for conveying said packets (2) on the first conveyor at the first speed (V1); and the second conveyor (5) comprises a second drive member (16) for conveying said packets (2) on the second conveyor (5) at the second speed (V2); the assembly (1) comprising a differential (32; 41) connected to the first drive member (15) and to the second drive member (16) to move said deflecting member (21) along said given portion (T) at a given transfer speed (V3) as a function of the first and second speed (V1, V2).

11) An assembly as claimed in Claim 10, characterized in that said differential is an epicyclic gear train (32) comprising a sun gear (33) connected to the first drive member (15); a planet carrier (34) connected to the second drive member (16); and a ring gear (35) connected to said transmission member (23).

12) An assembly as claimed in Claim 11, characterized in that said deflecting member (21) comprises a third drive member (29) for rotating said deflecting member (21); and a control unit (37) for controlling said third drive member (29); said control unit (37) being connected to the first and second drive member (15, 16) to drive said third drive member (29) as a function of signals related to the first and second speed (V1, V2).

13) An assembly as claimed in Claim 10, characterized in that said differential is an electronic differential (41), which emits a drive signal for driving a fourth drive member (42) for driving said transmission member (23).

14) An assembly as claimed in Claim 13, characterized in that said deflecting member (21) comprises a third drive member (29) for rotating said deflecting member (21); and a control unit (37) for controlling said third drive member (29); said control unit (37) being connected to the first and second drive member (15, 16) and to said electronic differential (41) to drive said third drive member (29) as a function of signals related to the first, second, and third speed (V1, V2, V3).